

Appln No. 10/606,165
Amdt date December 6, 2005
Reply to Office action of October 18, 2005

REMARKS/ARGUMENTS

Claims 1-2, 4-5, 10-11, 13, 15-18, 21-22, 24-26, and 28-32 are pending in the above-referenced application.

Claims 1 and 17 have been amended and claim 32 added to further define Applicant's invention and not for overcoming the prior art.

This is a response to the Office Action dated October 18, 2005 wherein the Examiner rejected claims 1-2, 4-5, 10-11, 13, 15-18, 21-22, 24-26, and 28-31 for obviousness under §103(a) by Mano et al. (US 6,712,649) in view of Freeman et al. (US 5,366,388). In view of the remarks that follow, reconsideration and a notice of allowance are respectfully requested.

Interview Summary Pursuant to MPEP §709.03

A telephone interview was conducted on December 2, 2005 between Mike Lin, President of ICC Corp., the Assignee of the present application, ICC's undersigned attorney, and Examiner Alexander Gilman. During the interview, the rejection of independent claims 1, 17, and 18 and the cited references, Mano et al. and Freeman et al., were discussed.

Applicant pointed out that Mano et al. disclose a removable plug type connector and Freeman et al. disclose a stationary type connector secured to a faceplate from a rear surface of the faceplate and that the two references are not compatible. For example, it was pointed out, that if Freeman's latching mechanism and mounting means to a back of a faceplate was incorporated with Mano's connector, then the latching mechanism would interfere with the tab on Mano's connector thus rendering it defective. Furthermore, it was pointed out that Freeman's latching mechanism and Mano's tab are positioned at the same location on their respective connectors and therefore would require modification in order to produce a workable outcome, which was neither disclosed or contemplated by either Freeman and/or Mano.

The Examiner stated that he agreed and acknowledged Applicant's arguments but that he needed to verify his position and requested that a formal response be filed, to which this Response represents.

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§103(a) Rejection of Claims 1-2, 4-5, 10-11, 13, 15-18, 21-22, 24-26, and 28-31

Claims 1-2, 4-5, 10-11, 13, 15-18, 21-22, 24-26, and 28-31 are rejected under §103(a) by Mano et al. in view of Freeman et al. In rejecting the claims, the Examiner contends that Mano et al., in FIGs. 1, 2, 9, and 10 (See, e.g., page 2 of the Office Action), disclose the invention as claimed except "Mano does not disclose the structural features of attachment the clip connector (Fig 2, 9, 10) within opening in a faceplate using a resilient member" (Sic). The Examiner then contends that Freeman et al. disclose the "structural features of attachment of a connector (12, 16) with opening (22) in a faceplate using a cantilever resilient member (36, 32)."¹

Independent claim 1 recites, in part a spring clip connector assembly comprising a faceplate and a spring clip connector including a housing having a front facing wall, a movable tab, and a spring, the front facing wall and the handle portion of the tab configured to be inserted through the opening of the faceplate; and wherein one of the housing and the rear facing surface of the faceplate includes a resilient member and the other of the housing and the rear facing surface of the faceplate includes a mounting surface, the resilient member movable between a first position that permits insertion of the front facing wall and the handle portion of the tab through the opening of the faceplate in a direction from the rear facing surface of the faceplate to the front facing surface of the faceplate and a second position that engages the mounting surface and blocks removal of the front facing wall and the handle portion of the tab back through the opening of the faceplate to form a snap lock connection.

Mano et al. disclose a connector (FIGs. 1-3, 7-9a, 10, 11, and 13) for connecting to a pin terminal 131 (FIGs. 1, 13). The connector, as disclosed in various embodiments, is configured to be inserted into a pin terminal, similar to a household plug plugging into an electrical outlet. The specification states that "[t]he plug housing 9 is formed in the shape of a rectangular parallelepiped and is insertable into and withdrawable from the connection recess 139 provided in the socket 127". (Col. 8, line 66 to Col. 9, line 1, emphasis added. See also Col. 6, lines 49-51, "The plug 1, just as with the plug 125, is so configured as to be insertable into and

¹ Although the Examiner did not say, presumably it was his position that it would have been obvious to combine Freeman et al. with Mano et al. to render the claims obvious.

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withdrawable from the connection recess 139"). Furthermore, in all the embodiments, only the FIG. 10 embodiment (and FIG. 11, which is a prior art) incorporates a spring for biasing a push button into a contact or closed position.

Freeman et al. disclose a wiring distribution system having a plurality of modular jacks 12, 16 with each jack having a flexible blade 36 comprising locking tab 32 for engaging an engagement track located on the wall panel 10 via the backside of the wall panel.

Preliminarily, Applicant submits that one of ordinary skill in the art would not have had a reasonable expectation of success in combining the references suggested by the Examiner.

According to MPEP §2143.01:

If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

As described by Mano et al., the plug must be "insertable into and withdrawable from the connection recess 139." However, if Freeman's flexible blade 36 is incorporated so that Mano's plug is insertable from a rear surface of a faceplate and is secured via a rear surface, then the plug would no longer be "withdrawable" from the faceplate as disclosed by Mano et al. The faceplate, which is fastened against a housing or a wall structure, would need to be removed each and every time the plug is to be withdrawn, which is contrary to the intended purpose of the Mano plug. Hence, the combination is defective.

The modification also conflicts with another section of MPEP §2143.01, which states:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

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Applicant submits that the modification suggested by the Examiner would no longer allow the Mano plug to be withdrawable from a pin terminal 131 and therefore conflicts with MPEP §2143.01. As discussed above, incorporating Freeman's flexible blade 36 to connect to a faceplate at the back or rear surface of the faceplate would eliminate the withdrawal function altogether, which destroys the intended purpose of the Mano plug.

In addition, claim 1 recites a spring, which makes all but the FIGs. 10 and 11 plugs disclosed by Mano remotely relevant. With respect to the FIG. 10 embodiment, the push button 77 would be located at the same point or location on the plug as the flexible blade 36 disclosed by Freeman. In addition, the push button 77 would appear to sit right at the opening of the faceplate if the plug was inserted from the rear of the faceplate, as suggested by the Examiner. Hence, not only will the push button 77 be inoperable due to interference by the opening, the flexible blade will also interfere with or block the push button. Accordingly, the modified plug as suggested by the Examiner would fail for these additional two reasons.

With respect to the FIG. 11 embodiment of the Mano reference, the spring 107 is shown biased against the wall surface of the faceplate 101. However, if the Freeman faceplate and connection means were incorporated, there would be a hole or an opening where the wall structure is located in FIG. 11. Hence, this would make the spring 107 non-functional since it could not push against air or space.

In view of the foregoing remarks, Applicant submits that the combination of Mano et al. in view of Freeman et al. is defective and does not render independent claim 1 obvious. Reconsideration and a notice of allowance are respectfully requested.

Because claims 2, 4-5, 10-11, 13, 15, 16, 21, 22, and 24-26 depend, either directly or indirectly from claim 1, they too are allowable for at least the same reasons as claim 1.

Independent claim 17 recites, in part, a spring clip connector assembly comprising a faceplate having an opening, a spring clip connector located in the opening of the faceplate, the spring clip connector comprising a housing and a spring engaging a tab, and not engaging the faceplate, to bias the tab to a closed position, wherein the housing includes a resilient member and the faceplate includes a mounting surface, the resilient member movable between a first

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position that permits insertion of the housing through the opening of the faceplate and a second position that engages the at least one mounting surface and blocks removal of the housing from the opening of the faceplate to form a snap lock connection.

Claim 17 clearly recites a spring clip connector comprising a spring engaging a tab and not engaging the faceplate and a resilient member on the housing for engaging a mounting surface on the faceplate, the resilient member movable between a first position that permits insertion of the housing through the opening of the faceplate and a second position that engages the at least one mounting surface and blocks removal of the housing from the opening of the faceplate to form a snap lock connection.

Because the spring clip connector recites a spring engaging a tab and not engaging the faceplate, all but the FIG. 10 embodiment of the Mano et al. reference is even remotely relevant. Applicant submits that combining the FIG. 10 embodiment with the resilient member and faceplate disclosed by Freeman et al. would not produce the claimed invention nor would the combination be functional or operable. In addition, even if the combination was functional, it directly conflicts with the primary purpose of the connector disclosed by Mano et al., that is to be insertable and withdrawable from the pin terminal 131. Among other things, claim 17 recites a housing being blocked from removal. Mano et al. therefore disclose a connector having an opposite configuration that requires withdrawal capabilities.

Additionally, the push button 77 on the FIG. 10 embodiment is located at the same point or location on the plug as the flexible blade 36 on the plug disclosed by Freeman. The push button 77 would appear to sit right at the opening of the faceplate if the plug was inserted from the rear of the faceplate, as suggested by the Examiner. Hence, not only would the push button 77 be inoperable due to interference by the opening, the flexible blade will also interfere with the push button. Accordingly, the modified plug as suggested by the Examiner would fail for these additional two reasons.

Because claims 28 and 29 depend from claim 17, they too are allowable for at least the same reasons as claim 17.

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Independent claim 18 recites, in part, a method for securing a spring clip connector to a faceplate having at least one opening, a bottom mounting structure and a top mounting surface, the spring clip connector comprising inserting the front wall of the housing through the opening of the faceplate and moving the front wall of the housing to a first position relative to the faceplate, the front wall in the first position being spaced apart from the faceplate by a first distance, and moving the front wall of the housing to a second position relative to the faceplate to engage the latch piece with the faceplate, the front wall in the second position being spaced apart from the faceplate by a second distance; wherein the second distance is greater than the first distance.

Claim 8 clearly recites a method of securing a spring clip connector to a faceplate having a bottom mounting structure and a top mounting surface. Looking at the Freeman et al. reference for similar or equivalent structure, the only bottom mounting structure and top mounting surface on the faceplate are those surfaces located on the rear of the faceplate. Hence, if Mano et al. is combined with Freeman et al., then the Mano connector would be installed from the rear surface of the faceplate and is engageable with the rear surface. Do so, however, would run counter with the Mano reference as that would prevent the plug from being "insertable" and "withdrawable".

Additionally, the push button 77 on the FIG. 10 embodiment is located at the same point or location on the plug as the flexible blade 36 on the plug disclosed by Freeman. The push button 77 would appear to sit right at the opening of the faceplate if the plug was inserted from the rear of the faceplate, as suggested by the Examiner. Hence, not only would the push button 77 be inoperable due to interference by the opening, the flexible blade will also interfere with the push button. Accordingly, the modified plug as suggested by the Examiner would fail for these additional two reasons.

Because claims 30 and 31 depend directly from claim 18, they too are allowable over the references for at least the same reasons as claim 18.

New claim 31 recites a spring clip connector assembly comprising: a faceplate comprising a front facing surface and a rear facing surface and an opening through the faceplate,

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and a spring clip connector including a housing structure having an exterior surface and a front facing wall with an opening for receiving a wire therethrough and a second opening, a movable tab located in the housing structure, the movable tab having a handle portion accessible at the second opening for an operator to move the tab and a contact portion, a conductor secured to the housing structure and having a contact positioned to engage a wire inserted through the opening in the front facing wall, and a spring in contact with both the tab and the housing structure, the front facing wall and the handle portion of the tab projecting through the opening of the faceplate and the housing structure mechanically coupled to the faceplate on the rear facing surface side of the faceplate; wherein the tab is movable between a closed position such that the contact portion of the tab is adjacent to the contact to secure a wire inserted through the opening in the front facing wall against the contact and an open position such that the contact portion of the tab is farther away from the contact than in the closed position to release the wire, the spring biasing the tab toward the closed position.

Applicant submits that the combination of Mano et al. in view of Freeman et al. does not render claim 32 obvious for similar reasons as discussed above for the patentability of independent claims 1, 17, and 18.

In view of the remarks set forth above, the application is thought to be in condition for allowance and early notice thereof is respectfully requested.

Should the Examiner finds it necessary to speak with Applicant's attorney to expedite prosecution, he is invited to contact the undersigned at the telephone number identified below.

Respectfully submitted,
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